Document Title	**Charter for the Network Control Center Miscellaneous Systems (NCCMS) Sustaining Engineering Review Board (SERB)**					
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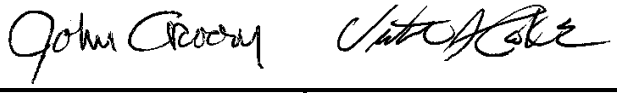

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Document History

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1. Purpose

This charter governs the operation of the Network Control Center Miscellaneous Systems (NCCMS) Sustaining Engineering Review Board (SERB). This SERB was created to cover those Network Control Center (NCC) systems that are not part of the NCC Data System (NCCDS). This charter addresses the membership, responsibilities, and processes used to perform SERB functions. This charter supersedes the White Sands Complex (WSC) Transmission Control Protocol/Internet Protocol (TCP/IP) Data Interface Service Capability (WDISC) SERB Charter, CSOC-GSFC-PRC-001004, and the Test Analysis and Reporting System (TARS) SERB Charter, CSOC-GSFC-PRC-000830.

2. Scope

The NCCMS SERB is responsible for non-NCCDS systems in the NCC, including but not limited to:

a. Mission Operations Support Area (MOSA).

b. WDISC.

c. Multi-Mission Display Processing System (MMDPS).

d. Automated Message Distribution System (AMDS).

e. TARS.

The SERB provides a forum for discussing problems, operational issues, and recommended modifications that may involve a Change Request (CR). The SERB has approval authority for all CRs to established baselines (hardware, software, documentation, and facility). Facility CRs shall only be submitted to the SERB if the change has the potential to affect the operational posture of the site (e.g., changes to technical AC power, HVAC, etc.).

3. Members/Responsibilities

a. SERB members shall review the agenda and be prepared to discuss and approve/disapprove CRs at the SERB meeting. Approval of CRs will be based on a consensus of SERB members at the meeting.

b. SERB membership can include the following:

1. Ad Hoc — As required.
2. CM — Configuration Management representative(s).
3. CSR — Customer Service Representative(s).
4. HWE — Hardware Engineering representative(s).
5. NASA — NASA representative(s) (non-voting).
6. OI&T/NIA — Operations Integration and Test/Network Integration and Analysis representative(s).
7. Ops — Production Operations representative(s).
8. QA — Quality Assurance representative(s).
9. SA — System Administration representative(s).
10. SE — System Engineering (SE) representative(s) (SERB facilitator).
11. SWE — Software Engineering representative(s).

c. The CSR, who is designated as the intermediary between CSOC and NASA, is an active member of the SERB.

d. Engineering personnel (HWE, SA, SE, and SWE) will provide analysis to facilitate the discussion and decision-making process, and perform the functions required to implement approved CRs.

e. The SERB facilitator (or designee) shall perform the following functions:

1. Develop and distribute an agenda for, and schedule SERB meetings as required.
2. Ensure that SERB meeting minutes are developed, distributed, and posted.

f. Any NASA representative(s) may sit in and participate in discussions, but will not have voting privileges.

4. Requirements

The CSOC Configuration Management Plan and the CSOC Systems Engineering Plan establish a hierarchy of review boards to review and approve proposed changes to established baselines. The SERB fulfills these requirements at the local level.

5. Safety

CRs involving safety will have the highest priority. The CSOC GSFC safety representative will be invited as an ad hoc member of the SERB for all CRs involving safety.

6. External Interfaces

The Sustaining Engineering Team (SET) will be the higher level authority for CRs that are out of the SERB's scope, or where no consensus can be reached. CRs will be sent to the SET for disposition, or as an intermediary for CRs requiring approval from the Goddard Space Flight Center (GSFC) Configuration Control Review Board (GCCRB). CRs will be considered out-of-scope and forwarded to the SET if one or more of the following criteria apply:

a. A new requirement(s) that impacts multiple CSOC sites.

b. A new requirement(s) that impacts more than one GSFC CSOC facility.

c. A new requirement(s) that requires additional funds must go to the CSR.

d. Completion Form work that has significant costs and the facility Cost Account Manager (CAM) has insufficient funds (labor or material).

e. Potential impact to mission safety, security, or performance.

7. Definitions

a. Change Request (CR). A generic term for any request to change an established baseline. CRs can include, but are not limited to:

1. Request for Engineering Change (REC).

2. Miscellaneous Systems Problem Report (MSPR). A sample MSPR form is provided in Figure 1. Form items are filled in as follows:

a) "Originator" is anyone who wants to submit a problem report and/or change.

b) "Affected Systems/Subsystems" should identify the miscellaneous systems and subsystems the form applies to, such as WDISC/HP or MMDPS (no subsystem).

c) "MSPR No.," "SERB Assessment," and "SERB Concurrence" should be filled in by the SERB facilitator.

d) "Change Developed By" should contain the name of the software developer or, if the change is a commercial product, the name of the company.

e) "Change Installed By" should contain the name of the system administrator.

f) "Change Verified By" should contain the name of the test team member or operator who verified the change.

3. Request for Engineering Test Notification (RETN).

4. Configuration Change Request (CCR).

5. Internal Discrepancy Report (IDR).

b. Implementation. All phases of a change from the approval of the original CR to the final acceptance of the change by operations.

MISCELLANEOUS SYSTEMS PROBLEM REPORT — **MSPR No.**

Part 1

Originator: _____ **Organization:** _____ **Date:** _____

Description of Problem:

Proposed Change:

Affected Systems/Subsystems: _____

Documentation Affected: _____

Related Requirements: _____

Needed By (Date/Release): _____

Part 2

SERB Assessment: _____

SERB Concurrence: _____ **Date:** _____

Part 3

Delivered in Release: _____

Change Developed By: _____ **Date:** _____

Change Installed By: _____ **Date:** _____

Change Verified By: _____ **Date:** _____

CSOC-GSFC-FORM-000362 (3/19/01)

Figure 1. Sample MSPR Form

8. Procedures

The NCCMS SERB process steps are illustrated in Figure 2.

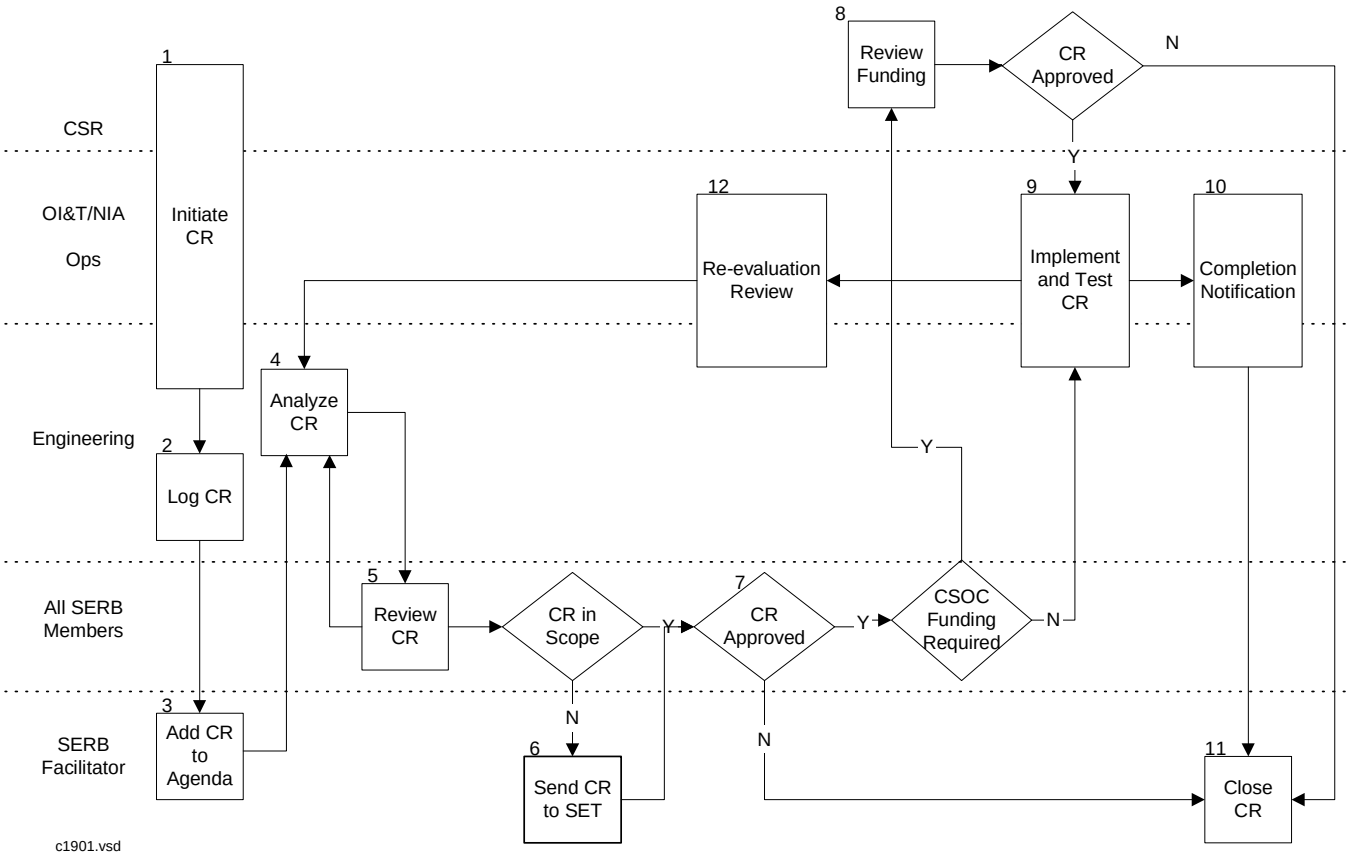

Figure 2. NCCMS SERB Process Map

Process Step	Responsible Party	Description of Step Activity(s)	Time Constraint (if applicable)
1	CSR, OI&T/NIA, Ops, Engineering	Discussion of problems or modifications that may require a CR will normally be initiated by OI&T/NIA, Ops, or engineering. However, a CR may be initiated by outside organizations via the CSR. The CR will be forwarded to the SERB facilitator. A CR can result in a fix or in a new capability.	Initial submission
2	Engineering	Logs shall be maintained of all CRs submitted for each type of change. The logs shall include, but not be limited to, the following fields: 1. An incremental and unique tracking number. 2. Date of submission. 3. Date boarded. 4. SERB disposition. 5. Final disposition. 6. Scheduled completion date. 7. Status (open or closed). 8. Actual completion date.	As appropriate during the life cycle of the change
3	SERB Facilitator	The SERB facilitator will schedule a SERB meeting, and develop and distribute an agenda no later than 15 working days after receipt of a CR. The agenda will include the original CR and any completed technical analysis.	No later than 1 working day prior to scheduled meeting
4	Engineering	If required, the SERB may assign the CR to applicable engineering organization(s) for technical analysis. The assigned engineering organization(s) will perform the analysis and return the result to the SERB facilitator for inclusion in the SERB agenda. The technical analysis may include, but is not limited to, the following: 1. Proposed resolution. 2. Preliminary cost analysis. 3. Schedule. 4. Risk analysis. 5. Impact on safety. 6. Impact on security. 7. Impact on operations. 8. Affected documentation.	Within 10 working days of initial submission

Process Step	Responsible Party	Description of Step Activity(s)	Time Constraint (if applicable)
5	All SERB members	SERB members will review the agenda material prior to the meeting and be prepared to discuss agenda items at the meeting. The disposition of agenda items will be by a consensus of the present SERB members. If consensus cannot be reached by the SERB, the CR will be raised to the SET for disposition.	
6	SERB Facilitator	The facilitator will send appropriate CRs to SET and notify the SERB of the final decision on CRs promoted to the SET.	
7	All SERB members	Disposition of CRs will be limited to the following: 1. Approved. 2. Approved pending funding. 3. Promoted to SET. 4. On-hold pending additional analysis. 5. Disapproved.	
8	CSR, ERB	CRs approved by the SERB pending CSOC funding will be forwarded to the CSR and ERB for review. CRs whose CSOC funding is not approved will be closed.	
9	Engineering, CM	CRs that have received final approval will either be 1) re-evaluated, or 2) implemented, tested, and verified.	
10	CM, Engineering, OI&T/NIA	The responsible party shall inform the SERB upon verification of CR fix or new capability. Major releases will be accepted by operations based on completion of an operations acceptance checklist.	
11	Engineering	The SERB will close the CR upon: 1) disapproval by the SERB, 2) disapproval by a higher level board, or 3) verification of CR fix or new capability.	
12	Engineering	Situations may arise during the implementation of a change that require the CR to be re-evaluated. A request for the re-evaluation of the original CR is required for the following reasons: 1. Additional funding is required. 2. Significant slip in schedule. 3. The change is no longer required. 4. Additional technical analysis required.	

9. References

The following publications contain information related to the SERB process. The current versions of these publications apply unless otherwise specifically noted.

a. CSOC System Engineering Plan, CSOC-CEN.SE01.000020.

b. CSOC Configuration Management Plan, CSOC-CEN.PI03.000032.

c. Operational Software Maintenance Process (OSMP), CSOC-GSFC-PLAN-000662.

d. System Engineering Section Work Instruction for Engineering Change Process, CSOC-GSFC-WI-000472.

e. CSOC GSFC System Change CM Process, CSOC-GSFC-PRC-000849.

f. Comprehensive Discrepancy System (CDS) Users Guide For the NCC Common Problem Reporting System, Release 2.0.

g. Hardware Engineering Local Operating Procedure for Engineering Change, CSOC-GSFC-LOP-001886.

10. Documentation

The CSOC Documentation Representative may have the following functions, at the option of the SERB:

a. Take minutes and record action items during SERB meetings.

b. Publish and distribute minutes on a timely basis.

c. Maintain business records online.

11. Quality Records

CRs become quality records upon closure. CR quality records will be maintained in accordance with the System Engineering Quality Records Master List, which is maintained in CSOC Online.

12. Forms

The MSPR form is unique to this process. The form is referenced in Section 7 and is shown as a sample in Figure 1. The form carries document number CSOC-GSFC-FORM-000362 and is available at http://csoc-ddcs.csoconline.com/olls/gsfcforms.asp.

13. The SERB Process

The SERB will approve modifications to the SERB charter. There are no documents generated that are unique to this process.

14. Security

The NCCMS SERB is the controlling body for any security plan associated with its systems. A security plan contains publicly available information regarding the NCC and its functions, operations, customers, network connectivity, and system interconnections. A security plan is typically not considered sensitive, unless it contains risk assessment information. The sensitive information for many CSOC facilities will be contained in a separate facility risk management plan that is under the control of security engineering. The responsibilities of the SERB with regard to its security plan are outlined below.

a. Maintain the documentation baseline for system, network, and configured hardware and software items, via the SERB process.

b. Schedule annual review of its security plan by SERB members for currency and provide comments back to the Officer of Primary Responsibility (OPR). The SERB facilitator initiates this review.

c. Review security impacts to the facility when there are major changes in the system architecture or when new systems are integrated into the facility. This review will be initiated by the SERB and performed by a security engineer.